

## ABSTRACT

A process for hydrogenating a polymer, which process comprises contacting a polymer containing an olefinic unsaturated group with hydrogen in the presence of a hydrogenation catalyst to hydrogenate the olefinic unsaturated group of the polymer, and recycling at least one part of the hydrogenated polymer for hydrogenation. According to the process of the present invention, there can be provided a polymer having a desirable degree of hydrogenation steadily for a long period.